vcvvvvvvv

**Teaching and Learning Math with Fractions**

**Secondary Perspectives**

Do calculators undermine student understanding of fractions?

Where are fraction concepts embedded in your course?

What fraction meanings are required to understand course content?

Pick a topic, and identify how could connect to students’ prior learning of fractions

Lingering Questions

(Wonderings?)

Laminated Chart paper for use during group work

Math process portfolio

Question Stems for feedback

Peer Assessment

Wait time

Turn and Talk

Low Prep Strategies to Help Students Learn!

Success Criteria – How will I know that I’ve learned ?

1. *I can connect fraction meanings to topics in my curriculum*
2. *I can identify a representation that would support an algebraic idea*

Additional Learning

Recalling rules for adding and multiplying / dividng

1. *There are many different ways to represent fractions. Different representations can reflect different meanings.*
2. *Understanding different fraction meanings and representations can help us connect to prior learning and remediate gaps*

Operator

Quotient

Part to Part (ratio)

*Breakout 2, 3, 4B, 6*

Part to Whole

sets

Area Models - Rectangles

***Representations of Fractions***

Linking Cubes, Pattern Blocks, Other Objects

***Fraction Meanings***

algebraic Operations involving Fractions

***Reasons Students Struggle***

relative measure

*Breakout 1, 2, 4A, 6*

Number Lines

Don’t see fractions as a value

*Considerations for Students with LDS*

***Learning Walls***

***Portfolios***

***Assessment***

***Effective Feedback***

***Questioning, Listening, Responding***

*Breakout 4A, 4B, 5*

Key Learning

Assessment Questions